

## Call for Papers

### Track 3 –Real-Time (and Networked) Embedded Systems

#### Track co-chairs

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❖ **FOCUS.** Industry is increasingly permeated with embedded systems involved in complex functionality, distributed intelligence and adaptive behavior. Some of these features are deployed locally exploiting new powerful computing architectures while other are offloaded to peripheral or remote computing centers through ubiquitous connectivity and global networks. This track focuses on the challenges that arise from designing these systems, particularly given real-time, power, reliability, available resources and other constraints.

#### ❖ TOPICS

- ❖ Application and Platform models: Real-Time Computing; Real-Time and Embedded Operating Systems and Communications; Networked and Distributed Embedded Systems; Multi/Many-Core Embedded Systems; Wireless Sensor (and Actuator) Networks; Cyber Physical Systems; Industrial Internet-of-Things; Integration with Cloud/Fog/Edge Computing; Time-sensitive networks
- ❖ Design, Analysis and Deployment methods: Design Tools, Flows and Methodologies; Hardware/Software Co-Design; Components, Platforms and Re-Use; Synthesis and Code-Generation; Formal Methods; Verification and Validation; Data Integration and Fusion; Quality of Service; Timing and Schedulability Analysis; software development for embedded systems
- ❖ Architectures and System-wide issues: Distributed and System-on-Chip Architectures; Reconfigurable Real-Time Systems; Context-Aware and Self-Organizing Systems; Mixed-Criticality Real-Time Systems; Reliable and Fault-Tolerant Real-Time Systems; Energy and Performance Optimization; Software-Defined Networks; network configurations; Reconfiguration and self-configuration

❖ **AIM.** The aim of the conference is to bring together researchers and practitioners from the industry and academia and provide them with a platform to report on recent advances and developments in the newly emerging areas of technology, as well as actual and potential applications to industrial and factory automation.

❖ **CONFERENCE FORMAT.** The conference will comprise multitrack sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations; work-in-progress (WIP) sessions; panel discussions on the state-of-the-art and emerging trends, involving leading experts from industry and academia; and public discussion sessions moderated by leading experts in the field of industrial automation systems.

#### AUTHOR'S SCHEDULE (2023)

##### ❖ Regular and special sessions papers

Submission deadline ..... March 31  
Acceptance notification ..... May 5  
Deadline for final manuscripts ..... June 16

##### ❖ Work-in-progress/ Industry practice papers

Submission deadline ..... May 12  
Acceptance notification ..... June 9  
Deadline for final manuscripts ..... June 16

#### Track Programme Committee

- ❖ Ahlem Mifdaoui, ISAE, Toulouse, France
- ❖ Konstantinos Bletsas, Polytechnic Institute of Porto, Portugal
- ❖ Reinder J. Bril, The Netherlands
- ❖ Gianluca Cena, National Research Council of Italy CNR-IEIT, Italy
- ❖ Patrick Denzler, TU Wien, Austria
- ❖ Hans Doran, UAS Winterthur, Switzerland
- ❖ Petru Eles, University of Linköping, Sweden
- ❖ Wilfried Elmenreich, Alpen-Adria-Universität, Austria
- ❖ Luis Ferreira, ISEP Porto, Portugal
- ❖ Javier Gutierrez, Universidad de Cantabria, Spain
- ❖ Martin Horauer, UAS Technikum Wien, Austria
- ❖ Mathieu Jan, CEA, France
- ❖ Marcio Kreutz, Federal University of Rio Grande do Norte, Brazil
- ❖ Luca Leonardi, University of Catania, Italy
- ❖ Lucia Lo Bello, University of Catania, Italy
- ❖ Julio Medina, Universidad de Cantabria, Spain
- ❖ Nicolas Navet, University of Luxembourg, Luxembourg
- ❖ Claudio Passerone, University of Torino, Italy
- ❖ Luis Miguel Pinho, Polytechnic Institute of Porto, Portugal
- ❖ Paulo Portugal, University of Porto, Portugal
- ❖ Davide Quaglia, Università di Verona, Italy
- ❖ Jean Luc Scharbarg, Université de Toulouse - IRIT - INPT/ENSEEIH, France
- ❖ Lucia Seno, National Research Council of Italy (CNR), Italy
- ❖ Ramon Serna Oliver, TTTech Computertechnik AG, Austria
- ❖ Frank Singhoff, University of Brest, France
- ❖ Mikael Sjödin, Mälardalen University, Sweden
- ❖ Pedro Souto, University of Porto, Portugal
- ❖ Marco Wehrmeister, Federal University of Technology - Parana, Brazil
- ❖ Patrick Yomsi, ISEP, Porto, Portugal
- ❖ Borislav Nikolic, Continental Automotive GmbH, Germany
- ❖ Holger Voos, University of Luxembourg, Luxembourg
- ❖ Luis Almeida, University of Porto, Portugal
- ❖ Marisol García Valls, Universitat Politècnica de València, Spain
- ❖ Oana Hotescu, University of Toulouse, France
- ❖ Sara Afshar, Volvo Construction Equipment, Sweden
- ❖ Guillermo Rodriguez-Navas, Nokia Lab, Israel
- ❖ Nan Guan, City University of Hong Kong, Hong Kong
- ❖ Matthias Becker, Royal Institute of Technology, Sweden
- ❖ Paulo Pedreiras, University of Aveiro, Portugal
- ❖ Mitra Nasri, Technical University of Eindhoven, The Netherlands
- ❖ Luis Oliveira, University of Pittsburgh, USA